

New Jersey Department of Transportation  
Bureau of Research  
**RESEARCH PROJECT**  
**Request for Proposals**  
**2011 Program**

**Date of RFP**  
**8/9/2010**

**Closing Date**  
**9/22/2010**

**Video Cameras in Access Link Paratransit Vehicles**

**Project No. 2011-07**

(Proposals must be prepared in accordance with NJDOT's *Information and Instructions for Preparing Proposals*. Please visit:

<http://www.state.nj.us/transportation/refdata/research/pdf/techpropresproj.pdf>

*Revised Proposal Evaluation Forms are available for your information on the website.)*

Proposals will be based on the merit of the information contained in the proposal. Budgets will be evaluated separately. Please place three (3) copies of the budget for this project in a separate sealed envelope.

**1. RESEARCH PROBLEM STATEMENT, BACKGROUND AND OBJECTIVES**

NJ TRANSIT is committed to the safety of its customers, employees, and the general public. NJ TRANSIT is equally committed to quality ADA service to customers with disabilities. To this end, there is a need to determine the optimal video recording system for the Access Link ADA Para transit fleet. Currently, the 360 vehicles used to provide NJ TRANSIT's Access Link statewide Para transit service are equipped with the Drive-Cam recording system, which captures 20-second video clips generated upon G-force or manual trigger. The limitations of this triggering compromise the effectiveness of the Drive-Cam system, as events with minimal G-Force impact and no manual triggering are not captured or addressed. As a result, opportunities to understand issues and incidents related to the service and safety (to include securement) of customers with disabilities (many who utilize mobility devices), to include enhancement of customer behavior issues, the need for specialized driver training and avoidance of repeat occurrences, are lost. With newer technology and recording systems now available which provide continuous, comprehensive video recording, it would be prudent to conduct research to determine the best and most cost-effective video recording system for the Access Link program.

The following objectives should be addressed by the research:

- Identify the actual current use of continuous recording in demand response or other public transportation applications in the US.
- Determine the projected costs per vehicle within the next three years for continuous recording vs. Drive Cam type.
- Document actual use of continuous recordings in legal cases for in demand response and/or school/public transportation.
- Determine the savings achieved from the use of continuous recording in legal challenges, both vehicular and criminal.
- Identify any systems that have migrated from short segment recordings to continuous recording.
- Determine if there are any transportation systems that abandoned continuous recording and have returned to short segment recording. Determine what the reasons were for the change especially in terms of costs, support and ROI.
- Discuss, compare and document the transfer and storage of data, methodologies, available costs, etc.

- Determine the capability of downloading data in a wireless fashion vs. a removal hardware medium.
- Determine if the data falls under OPRA for public access.
- Speculate where continuous recording technology will advance within the next three to five years.
- Determine if costs can be controlled depending on picture quality and if so to what extent dependant on digital, analog or other technologies now available or anticipated in the future.
- Determine if costs can be controlled depending on audio quality and if so to what extent dependent on digital, analog or other technologies now available or anticipated in the future.
- Consider the types of systems available and discuss the number of cameras recommended for a Para transit application with optimal coverage.

## 2. TASKS

[Provide a listing of appropriate general tasks divided into phases based on types of work (e.g., laboratory, field) or by year (e.g., year 1, year 2) or other appropriate milestones]

*The NJDOT is seeking the insight of proposal responders on how best to achieve the research objectives. Proposers are expected to describe a research effort that can realistically be accomplished as expeditiously as possible. Proposals must present the proposers' current thinking in sufficient detail to demonstrate their understanding of the problem and the soundness of their approach for conducting the required research.*

### **PHASE I – Literature Search**

Conduct a literature search of the current state of the practice.

After the award of the project, a more comprehensive literature search should be conducted. At the completion of this literature search, the PI will make a presentation to the Research Project Selection and Implementation Panel to discuss their findings and to discuss the appropriate research approach.

### **PHASE II – Research Approach and Anticipated Results**

Clear description of how you will solve the problem and implement anticipated findings. Work may be divided into phases (e.g., Laboratory, Field or Year 1, Year 2) as necessary to clarify tasks. *Exit Criteria* must be developed during this phase.

## 3. IMPLEMENTATION AND TRAINING PLAN

The PI must meet with the Research Project Selection and Implementation Panel (RPSIP) and other NJDOT units to present the findings and as appropriate train these personnel in the use the project results.

**The PI will develop an implementation plan as per the guidelines provided by NJDOT Research Bureau.**

## 4. DELIVERABLES:

[List of minimum deliverables necessary to complete the project]

- Presentation of Summary of Literature Search Results
- Discussion to Support and Refine the Project Tasks
- Project work plan.
- Technical Memorandum on the survey results

- Technical memorandum on the measures that are working or not working
- Technical memorandum on actions taken
- Interim Status reports suitable for Senior Leadership if required
- Quarterly Reports and Final Report, in color, with appropriate tables, graphs and charts in hard copy version, PDF file format, Word, and on CD ROM. Two copies plus one per RSIP member of each presentation, technical memorandum, draft final report and Final Report (plus 10 copies). The Final Report and Tech Brief are due three (3) months before the end date of the project to allow time for review by the Research Project Selection and Implementation Panel. Final Acceptance will be granted upon receipt of ten copies of the approved final report.

## 5. CONTRACT TIME:

The PI must provide the anticipated research study duration based on the proposed tasks. Consideration should be given to potential impediments so that adjustments are incorporated into the schedule minimizing the need for time extensions.

## 6. CONTACTS:

A meeting may be scheduled with interested parties after the RFP's are distributed to refine the objectives and deliverables and to promote a better understanding of the research needs. Questions on this topic **shall not** be directed to any Research Project Manager, Research Customer, or any other NJDOT person. All questions and answers shall be addressed **through email or if requested, at the pre-proposal meeting**. Contact Camille Crichton-Summers ([Camille.CrichtonSummers@dot.state.nj.us](mailto:Camille.CrichtonSummers@dot.state.nj.us)) on or before August 25, 2010 if you would like to request a pre-proposal meeting.

## 7. DEADLINE

**Proposals (10 single-bound copies) are due at the NJDOT Bureau of Research  
No later than 5:00 p.m. 9/22/2010**

**Authorization to Begin Work: 1/3/2011**-- estimated or as negotiated

## 8. DELIVERY INSTRUCTIONS:

**For private, paid messenger services such as Federal Express, DHL, UPS, etc., or for hand-carried deliveries:**

2011 PROPOSAL-NJDOT  
New Jersey Department of Transportation  
Bureau of Research  
1035 Parkway Avenue  
Trenton, New Jersey 08625-0600

**For U.S. Postal Service mail:**

New Jersey Department of Transportation  
ATTN: Camille Crichton-Summers  
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